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HEWLETT PACKARD

EX PARTE OR LATE FILED

August 4, 1995

Chairman Reed Hundt
Federal Communications Commission
1919 M Street, Suite 800
Washington, DC 20554

RE: ET Docket 94-124 ***Ex-Parte***

Dear Chairman Hundt:

It is our understanding that the environmental Protection Agency ("EPA") is currently working to identify power density limits for health purposes for radio frequencies under 300 GHz, and that EPA's recommendations may be used by the Federal Communications Commission ("FCC" or "Commission") to set limits in the above-referenced proceeding to allocate frequencies above 40 GHz. We further understand that EPA is considering a departure from the currently accepted IEEE standard of $10mW/cm^2$ in favor of a recommendation of $1mW/cm^2$, made by the National Committee on Radiation Protection ("NCRP").

We are very concerned about the negative implications such a recommendation would have on the millimeter wave ("mmWave") band at 59-64 GHz.

Scientific data simply does not exist for health effects of power levels at these frequencies. However, we want you to know that Dr. Henry Kues of Johns Hopkins University is leading a research project on the safety of millimeter wave exposure. Results will be published next year. (See attached announcement.) We believe this work will be of tremendous help in developing appropriate health-related power density standards.

Premature application to the 59-64 GHz band of an arbitrary limit that is not scientifically supported would negate all benefit of allocating the millimeter wave band. Furthermore, imposition of such a limit would delay development of products using mmWave technology and would make certain applications completely impractical.

Therefore, we urge the commission to take the following actions:

1) In addressing allocation of 59-64 GHz, the "first report and order" should explicitly decouple the equivalent isotropically radiated power ("EIRP") limits from the close range power density limits for health effects.

2) Defer specification of close range power density limits for health reasons in the initial allocation of 59-64 GHz until such time as scientific data can be taken into account. The Commission may reasonably specify in the "first report and order" that power density levels for health purposes will be set concurrently with its plan to adopt operational rules or a spectrum etiquette for the 59-64 GHz band.

3) Work with EPA to ensure that recommended power density levels for all frequencies are based on scientific data so that arbitrarily chosen limits do not unnecessarily thwart new product development.

We continue to appreciate all of the efforts of the Commission in making new radio frequencies available for commercial purposes. In particular, we commend the Commission's work in allocating the millimeter wave band, and we urge that any limitations to the band be made on the basis of sound science.

Sincerely,

Cynthia Johnson

Cynthia Johnson
Government Affairs Manager

Attachment

cc: Commissioner Andrew C. Barrett
Commissioner Rachelle B. Chong
Commissioner Susan Ness
Commissioner James H. Quello
Dr. Michael J. Marcus
Dr. Bob Cleveland
Janet Healer
Norb Hankin

The Johns Hopkins University
Applied Physics Laboratory

August 2, 1995

Research Funding Announcement

Hewlett-Packard Company has recently awarded an unrestricted grant to The Johns Hopkins University Applied Physics Laboratory (APL) to investigate the safety of millimeter wave exposure in the region of 60 GHz. This grant entitled "Ocular Health Hazard Assessment of mm Wave Exposure" will be lead by Henry Kues, a senior scientist at APL, in collaboration with personnel from the Johns Hopkins Medical Institutes and a Food and Drug Administration scientist. This multidisciplinary research effort is intended to serve as the initial study in a larger program that will address various safety issues associated with new technologies that use millimeter waves. It is anticipated that this study will require some additional funding and approximately one year to complete the initial phase of the work. Hewlett-Packard chose the use of an unrestricted grant to insure the complete independence of the investigators. The work will result in a final report to Hewlett-Packard followed by a peer-reviewed publication in the scientific literature.

Johns Hopkins Road, Laurel, Maryland 20723-6099

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